

W/OST21:DPR
5/29/03

DIRECTORY NAME	CONTENTS
SL.us008001/	Data root - for NWS Telecommunication Gateway Server (top directory)
ST.expr/	Status of data as experimental (NDFD data is expected to be made operational in a transitional manner).
DF.gr2/	WMO GRIB files (Edition two)
DC.ndfd/	Data category: National Digital Forecast Database
AR.aaaaaaaa	Area of Data: could be CONUS, 1 of 16 CONUS overlapping sectors, Alaska, Hawaii, Guam, or Puerto Rico.
ds.sssss	FILE NAME = data subcategory containing abbreviated NDFD element names.*

* The current file for each element will be kept until overwritten by a new file for the same element.

Current NDFD Elements	TT	Subcategory ds.sssss	# of grids in file	Time Increment	Size per sector
Daytime Max Temperature	YG	maxt	7-8	24/168	100k
Nighttime Min Temperature	YH	mint	6-7	24/168	100k
Probability of Precipitation (12 hour period)	YD	pop12	13-15	12/168	100k
Quantitative Precipitation Forecast	YI	qpf	10-13	6/72	100k
Sky Cover	YA	sky	33-41	3/72, 6/168	200k
Snowfall Amount	YS	snowa	7	6/36	100k
Surface Temperature	YE	temp	33-41	3/72, 6/168	300k
Dewpoint Temperature	YF	td	33-41	3/72, 6/168	300k
Wind Direction	YB	wdir	33-41	3/72, 6/168	300k
Wind Speed	YC	wspd	33-41	3/72, 6/168	150k
Weather	YJ	wx	33-41	3/72, 6/168	150k
20 ft Wind Direction	YU	fwdir	3-5	12/48	50k
20 ft Wind Speed	YV	fwspd	3-5	12/48	30k
Wave Height	YK	waveh	9-15	3/48	70k

Note: Number of grids in a file varies according to time of day. The maximum is achieved when new grids are introduced at 18z.

New NDFD Elements (from WFOs)	TT	Subcategory ds.sssss	# of grids in file	Time Increment	Size per sector
Apparent Temperature		atemp	17-25	3/72	150k
Relative Humidity		rh	33-41	3/72, 6/168	300k
Floating PoP12		fpop	33-41	3/72, 6/168	200k
Wind Gust Speed		wgust	33-41	3/72, 6/168	300k
Public Watch, Warning, Advisories		pwwa	17-25	3/72	30k
Maximum Relative Humidity		maxrh	2-3	24/48	30k
Minimum Relative Humidity		minrh	2-3	24/48	30k
Lightning Activity Level		lal	5-9	6/48	100k
Mixing Height		mixh	3-5	12/48	50k
Transport Wind Direction		twdir	3-5	12/48	50k
Transport Wind Speed		twspd	3-5	12/48	30k
Fire Wx Watch, Warning, Advisories		fwwa	17-25	3/72	20k
Haines Index		haines	5-9	6/48	100k
Visibility		visby	9-15	3/48	150k
Ice Coverage		icecvg	9-15	3/48	150k
Swell Height		swhgt	9-15	3/48	150k
Swell Direction		swdir	9-15	3/48	150k
Marine Watch, Warning, Advisories		mwwa	17-25	3/72	20k

Note: Number of grids in a file varies according to time of day. The maximum is achieved when new grids are introduced at 18z.

New NDFD Elements (from CPC)	TT	Subcategory ds.sssss	# of grids in file	Time Increment	Size per sector
8-14 Day Temperature Above Normal		tmpabv14d	1	/14d	5k
8-14 Day Temperature Below Normal		tmpblw14d	1	/14d	5k
8-14 Day Precipitation Above Normal		prcpabv14d	1	/14d	5k
8-14 Day Precipitation Below Normal		prcpblw14d	1	/14d	5k
30 Day Temperature Above Normal		tmpabv30d	1	/14d	5k
30 Day Temperature Below Normal		tmpblw30d	1	/45d	5k
30 Day Precipitation Above Normal		prcpabv30d	1	/45d	5k
30 Day Precipitation Below Normal		prcpblw30d	1	/45d	5k
90 Day Temperature Above Normal		tmpabv90d	12	30d/375d	60k
90 Day Precipitation Below Normal		tmpblw90d	12	30d/375d	60k
90 Day Precipitation Above Normal		prcpabv90d	12	30d/375d	60k
90 Day Precipitation Below Normal		prcpblw90d	12	30d/375d	60k

	Current elements Original estimate	Current elements Revised estimate	New elements	Total (with new elements)
16 CONUS sectors	80 mb	45 mb	45mb	90 mb
CONUS	70 mb	40 mb	40mb	80 mb
4 OCONUS sectors	20 mb	15 mb	15 mb	30 mb
Total Sizes	170 mb	100 mb	100 mb	200 mb

Note: Original estimates were made in 2002 based on expected data compression.. Revised estimates are based on empirical data (except OCONUS).

Expected Growth:

Spatial resolution

Current=5 km Expected=2.5 km

Impact=4x Date=2004

of elements

Current=14 New =30 Total = 44 Expected= 90+

Impact=3x Date= 2005

Temporal Resolution

Current = 3 hrs to 72 and 6 hrs to 168 Expected= 1 hr to 72, and 3 hrs to 168

Impact=2x Date= 2005 (Not all elements are effected)